

WHAT IS CLAIMED IS:

1. An insulator capacitance analyzer for analyzing C-V characteristics of a first MIS structure having unknown capacitance, comprising:

a capacitance structure having known capacitance and configured so as to be serially connectable to the first MIS structure; and

a measuring section for measuring synthesis capacitance of the serially-connected first MIS structure and capacitance structure.

2. An insulator capacitance analyzer according to claim 1, wherein the capacitance structure includes at least one of a second MIS structure, a dielectric, and a capacitor.

3. An insulator capacitance analyzer according to claim 1, wherein the capacitance structure is configured so as to be removable from the insulator capacitance analyzer.

4. An insulator capacitance analyzer according to claim 1, further comprising:

a plurality of capacitance structures each having known capacitance and configured so as to be serially

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connectable to the first MOS structure; and

a switch for selecting one of the plurality of capacitance structures as the capacitance structure.

5. An insulator capacitance analyzer according to claim 1, wherein the equivalent silicon oxide thickness of the capacitance of the capacitance structure is 3 nm or more.

6. An insulator capacitance analyzer according to claim 1, wherein the capacitance structure is configured so as to prevent direct tunnel leakage current from flowing through the capacitance structure.

7. An insulator capacitance analysis method for analyzing C-V characteristics of a first MIS structure having unknown capacitance, comprising the steps of:

serially connecting the first MIS structure to a capacitance structure having known capacitance;

measuring synthesis capacitance of the serially-connected first MIS structure and capacitance structure; and

calculating capacitance of the first MIS structure based on the synthesis capacitance.

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